October 10, 2014

AMMONIA CRITERIA IMPLEMENTATION STAKEHOLDERS MEETING
AGENDA

Wednesday, October 29

8:30 – Welcome, Introductions, Ground Rules [*NACWA*]
8:40 - EPA Welcome [*OST Manager Invited*]
8:50 - Stakeholder Opening Remarks [*NACWA/WEF/WERF/ACWA*]
9:00 - Overview of Ammonia Criteria and Implementation Guidance [*HECD and SHPD Invited*]

State of the Science: Fate & Effects of Ammonia on Freshwater Aquatic Environment
9:45 - Municipal and Industrial Dischargers' Concerns Related to Compliance [*Stakeholder Selected/NACWA*]
10:30 - **Break**
10:45 - Options for Implementation Approaches & Issues Specific to Ammonia in Freshwater [*Stakeholder Selected/ACWA*]
11:30 - Freshwater Mussel Presence/Absence and Appropriate/Defensible Mussel Survey Methods (including, spatial distribution/density throughout US and estimated increase in mussel population with implementation of criteria) [*Mussel Expert Invited*]
12:15 - **Lunch**

Discussion Topics [*Facilitated with Guest Participation – see Attachment A*]
1:30 - Topic #1: Guidance Options for Criteria Implementation (including variance, use attainability analysis, site-specific criteria using recalculation methodology, controlled discharge, seasonal discharge)
2:30 - Discussion Topic #2: Identification of Issues/Concerns Related to State Implementation
3:30 - **Break**
3:45 - Discussion Topic Area #3: Identification of Issues/Concerns Related to Determination of Mussel Presence/Absence
4:45 - Recap/Closing Remarks [*NACWA/Open Forum*]
5:15 - **Adjourn**

Thursday, October 30

8:30 - Outstanding Issues [*Open Forum*]
9:00 - Prioritization of Data Gaps/Shared Implementation Issues:

- Implementation Guidance
- State implementation (including identification of near and far field impacts of WWTF discharges and the relationship to the scope of mussel surveys)
    - Discussion of mixing zones, as appropriate
- Determination of Mussel Presence/Absence (including guidance on minimum data expectations)
    - Physical stream (habitat) survey
    - Other methods (e.g. DNA analysis)
    - Snail presence/absence analysis if mussels are determined absent
- Potential development of ammonia criteria implementation tool if mussels absent

10:30 - **Break**
10:45 - Feasibility and Support for Projects to Address the Highest Priority Issues and Development of a Framework of “Common Principles”
12:15 – Recap/Closing Remarks [*NACWA/Open Forum*]
12:30 - **Adjourn meeting**

Agenda Attachment A – Stakeholder Issues of Interest for Facilitated Discussion

Discussion Topic #1 – Implementation Guidance

- EPA guidance provides flexibilities that need explored. Which are most important?
- Where should water quality measurements be made, at surface or depth based on where the juveniles are developing?
- How far downstream from the discharge should the assessment cover?
- How to determine ability of species returning to a site, e.g., what if the site been permanently altered (urbanization)? How is this determined?
- How to define whether the economic costs of attainment would be a "substantial/widespread impact"?
- In situations where neither EPA's national criterion nor its calculated values for mussels -absent appear appropriate, what are the best methods for development of site-specific criteria? Ammonia WER? Recalculation Procedure?

Discussion Topic Area #2 – State Implementation

- Are there states or areas where the premise of absence could be assumed first and dependent on a review to show presence?
- What are some state/region examples of designated uses defined or modified based on mussel presence/absence and how is it done?
- Should formal UAAs have a role?
- Reasonable potential to exceed standard – relevant temperature and pH data critical – what can be done to make sure the data is representative of the site and its area of highest ammonia concentrations? What are some examples?
- How can we establish principles for establishing the time allowed to the standard?
- How to match permit limit duration and timing to environmental and life cycle realities?
- What about changing design dilution flow and design pH specifications?
- Changing the actual location of the discharge point for more dilution or better receiving water qualities: Are there regulatory or feasibility roadblocks?
- Are there any other flexibilities?

Discussion Topic Area #3 – Determination of Mussel Presence/Absence

- How is mussel presence/absence defined? How is attainment of aquatic life designated use defined? And how do the definitions affect how it is determined?
- What kind and how much data are required - what is the cost?
- Can a more rapid and less expensive screening process be applied, and how?
- Does availability of host fish play a role in determining whether unionids should be protected at a site? Examples?
- Does availability of suitable habitat alone define presence? If not, what other information is necessary?
- How can it be determined whether other site characteristics or stressors will prevent mussel populations from recovering after attaining the ammonia criteria?
- Are there ambient receiving water characteristics (e.g., water hardness, alkalinity, turbidity, current speed, temperature) that could be expected to **not** support unionid juveniles that are protected by the criteria?
- Can we develop specific recommended approaches, and establish their scientific defensibility?